

Vol. 59, No. 1 April 25, 2012

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Full Papers

Japanese Journal of Ichthyology

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Distribution pattern of *Acheilognathus cyanostigma* (Cyprinidae, Acheilognathinae) in the Midori River system, northern Kyushu Island, Japan

Takeshi Ohata, Ryutei Inui, Jun Nakajima, Haruhiko Oura and Norio Onikura

Abstract *Acheilognathus cyanostigma* is an exotic fish species in Kyushu Island, being an endangered species in central Honshu Island. The distribution pattern of the exotic population in the Midori River system, Kyushu Island, Japan was examined, the species occurring at 28 low-altitude sites out of 96 sites investigated. The relationships between presence/absence of the species and environmental factors (altitude, water depth, current velocity, turbidity, river width and riverbank conditions) were analyzed using a generalized linear mixed model, riverbank conditions, water depth, turbidity and altitude having either positive or negative effects. In particular, a concrete-covered riverbed was found negatively affect distribution.

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Redescription of the Temperate Seabass *Lateolabrax latus* from Yaku-shima Island, Kagoshima Prefecture, southern Japan with notes on riverine habitats

Atsunobu Murase, Yusuke Miyazaki and Hiroshi Senou

Abstract Twenty-seven individuals of *Lateolabrax latus* (165.7–691.5 mm in total length), a species normally associated with a rocky offshore habitat in southern Japan, were collected from July to October 2009 in the lower reaches of rivers in Yaku-shima Island, Kagoshima Prefecture, southern Japan by hook and line. Furthermore, schools of immature individuals were observed around hard structures (including rocks and tetrapods) or in riffle zones in the rivers, *L. latus* clearly making active use of river environments in Yaku-shima Island during its life history. Because a detailed morphological description of the species has not been given since its original description, the specimens from Yaku-shima Island are described and compared with other congeners. Characters of the former agreed closely with the original diagnosis of *L. latus*. Some individuals less than 200 mm standard length had tiny scattered spots, smaller than those on other congeners, on the region above the lateral line. Specimens from the Ambo River represent the southernmost record of the species.

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Abundance and growth trajectory of Japanese sandfish (*Arctoscopus japonicus*) juveniles in Mutsu Bay

Mitsuhiro Kudo, Tetsuya Takatsu, Shotaro Fukui and Ryota Komoto

Abstract Although spawning of Japanese sandfish (*Arctoscopus japonicus*) does not occur in Mutsu Bay, juveniles of the species were first discovered in the bay in June 2003 (following the initiation of yearly sampling in 1991), also being collected in subsequent years. To better understand the function of Mutsu Bay as a nursery area and the growth characteristics of the early life stages of the sandfish population, their abundance and otolith microstructure were investigated. Juveniles distributed along the sea floor in temperatures of 7.4–10.0°C were sampled in June 2010, measuring 32.4–62.7 mm in standard length some 100–145 days after hatching, an indication of their having hatched from January 14 to February 27 (24% and 76% of juveniles hatched in January and February, respectively). June sampling surveys, conducted each year, revealed that high juvenile abundance in the bay occurred only when adult sandfish had been abundant in the Sea of Japan, off Akita and Aomori Prefectures. The origin of the juveniles in Mutsu Bay may have been the eastern Sea of Japan population, distributed off the northwestern coast of Honshu Island, the Tsushima/Tsugaru Warm Current possibly conveying the larvae and juveniles into Mutsu Bay. Median hatching dates did not differ between sampling stations in Mutsu Bay, although relatively small juveniles with narrow otolith increment widths occurred in the inner part of the bay in June 2010. Such slow-growing juveniles may have been early arrivals to Mutsu Bay from the hatching area, thereby experiencing colder water in the bay from a young age than later arrivals.

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Short Reports

Japanese Journal of Ichthyology

Vol. 59, No. 1, pp. 37-43

Critical status of the genetically-distinct, oriental weather loach (*Misgurnus anguillicaudatus*) population on Iriomote Island, Japan

Yuichi Kano, Jun Nakajima, Hiroshi Mizutani, Yuko Nakazato, Nagahiro Nakazato, Yoshitsugu Kaji, Liangliang Huang, Shin Nishida and Yasuyuki Hashiguchi

Abstract A capture survey of the oriental weather loach *Misgurnus anguillicaudatus*

conducted widely throughout Iriomote Island, Japan in spring 2011, resulted in a single individual caught in a paddy field. It is likely that the distribution and density of the loach on Iriomote Island are extremely limited, the population being close to extinction, although a questionnaire survey of local people indicated formerly high densities. A phylogenetic analysis based on the haplotype of the mitochondrial DNA (control region) determined from the sampled individual and three additional samples, showed a deviation from the three major clades/subclades recognized in previous studies, suggesting that Iriomote Island population was genetically differentiated from those in other regions.

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Japanese Journal of Ichthyology

Vol. 59, No. 1, pp. 45-48

First Japanese records of a deep-sea chiasmodontid fish, *Dysalotus oligoscolus*

Kazuyuki Ban and Atsushi Fukui

Abstract Four specimens (62.5–67.8 mm in standard length) of the chiasmodontid fish, *Dysalotus oligoscolus* Johnson and Cohen, 1974, collected off Boso peninsula, the northeast Bonin Islands and southeastern Kyushu, Japan, represent the first records of the species from Japanese waters. The species is distinguished from a congeneric species, *Dysalotus alcocki*, by the following combination of characters: two rows of minute external prickles arranged above and below the lateral line; prevomerine teeth present. The new Japanese name “Kakushi-toge-bouzugisu” is proposed for the species.

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**Establishment of brown trout *Salmo trutta* in Odori Stream, Jinzu River system,
Gifu Prefecture, Central Japan**

Daisuke Ishizaki, Yoshinori Taniguchi and Taiga Yodo

Abstract Brown trout *Salmo trutta*, a well-known game fish, has had considerable adverse effects worldwide on native aquatic organisms in waters to which it has been introduced. Although the establishment of brown trout and its impact on native biota have been frequently reported in Japan, such reports have been primarily limited to Hokkaido. In 2008 and 2009, 11 juvenile and 6 adult brown trout, including a mature female, were captured in the Odori Stream, Jinzu River system, central Japan, a mating pair of brown trout swimming near a redd also being observed in 2009. It is now considered that the species has become established, following an accidental introduction from a local hatchery in 2004 during a severe flood indicating that future possible introductions of this species must remain a concern, even in central Japan.

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**First record of the anthiine fish *Plectranthias elongatus* from the East China Sea,
Japan**

Makoto Okamoto, Koichi Hoshino and Yoichi Kogure

Abstract An anthiine fish, *Plectranthias elongatus* Wu, Randall and Chen, 2011, previously known only from the holotype collected Taiwan, is reported from Japanese waters for the first time, on the basis of a single specimen (37.0 mm in standard length, SL) collected in the East China Sea. The species is characterized by the following

combination of characters: dorsal fin rays X, 15–17; pectoral fin rays 16; pored lateral-line scales 31; snout without scales; maxilla scaly; body elongate, body depth 3.7–3.8 in SL; posterior margin of preopercle serrate, no antrorse spines on ventral margin; margins of interopercle and subopercle smooth; canine teeth in jaws; 4th and 5th dorsal spines about equally long and longest; color when fresh, pinkish-white with large orange-red spots, one spot extending onto posterior part of spinous dorsal fin. The specimen from the East China Sea is described and a new standard Japanese name, “Mizuho-hanadai” is proposed for the species.

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Japanese Journal of Ichthyology

Vol. 59, No. 1, pp. 61–67

First Japanese record of a damselfish, *Chromis earina* (Perciformes, Pomacentridae), from Iou-jima Island, Kagoshima Prefecture, Japan

Hajime Nishiyama, Shin-ichi Dewa, Satoru N. Chiba and Hiroyuki Motomura

Abstract A single specimen of *Chromis earina* Pyle, Earle and Greene, 2008, previously known from Puluwat westward to Palau, and southward to Papua New Guinea, Indonesia, Vanuatu and Fiji, was collected from Iou-jima Island, Kagoshima Prefecture, Japan at a depth of 80 m. A second example of the species was photographed at a depth of 70 m in the same locality. The collected specimen was characterized by the following combination of characters: XIII dorsal-fin spines; II, 12 anal-fin rays; 18 pectoral-fin rays; 3 spiniform caudal rays; $6 + 20 = 26$ gill rakers; and a poorly-defined, broad, white vertical band, its width subequal to that of 3 or 4 scales, on the mid-lateral surface of the body when alive. The specimen represents the first record of *C. earina* from Japan and is the northernmost record of the species.

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Japanese Journal of Ichthyology

Vol. 59, No. 1, pp. 69-74

The records of a stichaeid fish, *Anisarchus medius*, from Japan

Tomoyuki Yamanaka and Mamoru Yabe

Abstract A stichaeid fish, *Anisarchus medius* (Reinhardt, 1837), is described as the reliable record of this species from Japan, on the basis of five specimens collected from the Okhotsk coast of Hokkaido. *Anisarchus medius* is distinguishable from *A. macrops* by having the anal-fin membrane broadly continuous with the caudal fin, smaller eyes (orbital length 24–29%HL) and 58–63 dorsal-fin spines, and in lacking a black spot on the anterior part of the dorsal fin. Although *A. medius* was previously reported from Volcano Bay, Hokkaido, Japan, this record was most probably based on the local population of *A. macrops*.

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